

DOCKET NO.: BTG0008-100 (142769US01)**PATENT****REMARKS**

Claims 60-111 were pending in the present application. Claims 60-111 have been canceled without prejudice to their presentation in another application. New claims 112-163 have been added. No new matter has been added. Upon entry of the present amendment, claims 112-163 will be pending.

Support for new claim 112 can be found, for example, in original claim 25 as it referred to claim 1, part (a)(i) and (a)(ii).

Support for new claim 113 can be found, for example, at page 6, lines 10-11 of the specification.

Support for new claim 114 can be found, for example, in original claim 25 as it referred to claim 1, part (a)(i) and (a)(ii).

Support for new claim 115 can be found, for example, at page 6, lines 10-11 of the specification.

Support for new claim 116 can be found, for example, at page 10, lines 15-17, page 22, line 8, and page 11, lines 24-25 of the specification.

Support for new claim 117 can be found, for example, at page 11, lines 25-31, and page 22, lines 10-11 of the specification.

Support for new claim 118 can be found, for example, at page 10, lines 15-17 of the specification.

Support for new claim 119 can be found, for example, at page 28, lines 9-11, page 10, lines 15-17, and page 22, line 8 of the specification.

Support for new claim 120 can be found, for example, in original claim 19, at page 20, line 3 to page 21, line 2, and at page 21, lines 11-12 and 20-21 of the specification.

Support for new claim 121 can be found, for example, at page 21, lines 21-22 of the specification.

Support for new claim 122 can be found, for example, at page 21, lines 21-24 of the specification.

Support for new claim 123 can be found, for example, in original claim 1, part (iii).

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Support for new claim 124 can be found, for example, at page 23, line 28 to page 24, line 3 of the specification.

Support for new claim 125 can be found, for example, at page 24, lines 7-12 and 26-28 of the specification.

Support for new claim 126 can be found, for example, at page 24, lines 9-10 of the specification.

Support for new claim 127 can be found, for example, at page 24, line 24 of the specification.

Support for new claim 128 can be found, for example, in original claim 1, part (iv) and at page 11, lines 24-25 of the specification.

Support for new claim 129 can be found, for example, in original claim 26, and at page 11, lines 25-31 of the specification.

Support for new claim 130 can be found, for example, at page 11, lines 27-31 of the specification.

Support for new claim 131 can be found, for example, at page 11, lines 27-29 of the specification.

Support for new claim 132 can be found, for example, at page 24, lines 30-31 of the specification.

Support for new claim 133 can be found, for example, at page 25, lines 1-2 of the specification.

Support for new claim 134 can be found, for example, in original claim 43.

Support for new claim 135 can be found, for example, in original claim 44.

Support for new claim 136 can be found, for example, in original claim 22.

Support for new claim 137 can be found, for example, in original claim 23.

Support for new claim 138 can be found, for example, in original claim 24.

Support for new claim 139 can be found, for example, in original claim 52.

Support for new claim 140 can be found, for example, in original claim 53.

Support for new claim 141 can be found, for example, in original claim 58.

Support for new claim 142 can be found, for example, in original claim 59.

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Support for new claim 143 can be found, for example, in original claim 1.
Support for new claim 144 can be found, for example, in original claim 5.
Support for new claim 145 can be found, for example, in original claim 6.
Support for new claim 146 can be found, for example, in original claim 7.
Support for new claim 147 can be found, for example, in original claim 8.
Support for new claim 148 can be found, for example, in original claim 9.
Support for new claim 149 can be found, for example, in original claim 10.
Support for new claim 150 can be found, for example, in original claim 11.
Support for new claim 151 can be found, for example, in original claim 13.
Support for new claim 152 can be found, for example, in original claim 17.
Support for new claim 153 can be found, for example, in original claim 18.
Support for new claim 154 can be found, for example, in original claim 29.
Support for new claim 155 can be found, for example, in original claim 45.
Support for new claim 156 can be found, for example, in original claim 46.
Support for new claim 157 can be found, for example, in original claim 55.
Support for new claim 158 can be found, for example, in original claim 55.
Support for new claim 159 can be found, for example, in original claim 56.
Support for new claim 160 can be found, for example, in original claim 56.
Support for new claim 161 can be found, for example, in original claim 51.

Support for new claim 162 can be found, for example, at page 27, line 31 to page 28, line 2 of the specification.

Support for new claim 163 can be found, for example, at page 17, lines 9-13, page 2, lines 24-31, and in original claims 14 and 16.

The Examiner has mistakenly restricted claims 60-111 into 17 groups asserting that Applicants have failed to provide a special technical feature which defines a contribution over the prior art, as required under PCT Rule 13.2. The unifying feature of the claims, however, is not the sequence of a natural occurring homologue of gliadin or its analogue. Rather, one special technical feature which defines a contribution over the prior art is the identification of region 62-68 of gliadin as being of particular immunological significance. This region is **not** disclosed or

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suggested in any of the references of record. Thus, the claims comply with the necessary requirements for unity of invention.

Applicants remind the Examiner that Applicants teach at page 6, lines 22-24 of the specification that:

...the epitope of the invention does not include this naturally occurring whole gliadin protein, and does not include other whole naturally occurring gliadins.

In addition, SEQ ID NO:1 (PQPELPY) is derived by deamidation of the natural sequence PQPQLPY found at positions 62-68. Such deamidation occurs in the intestine, after the protein has already been subjected to the proteolytic activity of the stomach. Consequently, the sequence of SEQ ID NO:1 is not present in full-length gliadin. Thus, the claimed peptides do not encompass full-length naturally-occurring gliadins.

In sum, any disclosure of naturally-occurring homologues of gliadin or gliadin analogues in the references of record does not destroy the unity of the present claims, one common inventive concept of which relates to the identification of region 62-68 of gliadin as being of immunological significance. Thus, no claims should be separated on the basis of unity of invention.

Nonetheless, Applicants herein elect group IX directed to peptides/analogues of gliadin (which should contain new claims 112-119). All other claims that recite methods of using or compositions/kits comprising the peptides of new claims 112-119 should also be included in the elected group. Indeed, no claims should be separated based upon a unity of invention standard.

Applicants submit that the present response is complete. Applicants also submit that, at a minimum, all pending claims must be considered in the present application without restriction because they clearly comply with the unity of invention standard. In view of the foregoing, Applicants respectfully submit that the claims are in condition for allowance. An early notice of the same is earnestly solicited.

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The Examiner is invited to contact Applicants' undersigned representative at (215) 665-6914 if there are any questions regarding Applicants' claimed invention.

Respectfully submitted,



Paul K. Legaard, Ph.D.
Registration No. 38,534

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COZEN O'CONNOR
1900 Market Street
Philadelphia, PA 19103-3508
Telephone: (215) 665-6914
Facsimile: (215) 701-2141